**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (previously presented): A synthetic polymer and starch blend comprising:

1-30 wt.% a granular and unplasticized starch having a moisture content of less than about 1%;

1-24 wt.% a compatibilizer comprising a polymer and a grafting compound, wherein said grafting compound is covalently bound to said polymer, and

the remainder a second polymer.

Claim 2 (canceled):

Claim 3 (original): The blend of Claim 1 wherein said starch is selected from the group consisting of cornstarch, wheat starch, rice starch, and potato starch.

Claim 4 (previously presented): The blend of Claim 1 wherein said compatibilizer is comprised of 75-98 wt.% polymer and 2-25 wt.% grafting compound.

Claim 5 (original): The blend of Claim 4 wherein said grafting compound is maleic anhydride.

Claim 6 (original): The blend of Claim 4 wherein the polymer of the compatibilizer is selected from the group consisting of polyethylene, polypropylene, polystyrene, polybutylene, poly(styrene-ethylene-butylene-styrene), poly(ethylene terephthalate), polyvinyl fluoride, polyvinyl chloride, or derivatives thereof.

Claim 7 (original): The blend of claim 4 wherein said grafting compound comprises 5 wt.% of said compatibilizer.

Claim 8 (previously presented): The blend of claim 1 wherein said second polymer is selected from the group consisting of polyethylene, polypropylene, polystyrene, polybutylene, poly(styrene-ethylene-butylene-styrene), poly(ethylene terephthalate), polyvinyl fluoride, polyvinyl chloride, or derivatives thereof.

Claim 9 (previously presented): The blend of Claim 1 wherein said second polymer is polyethylene.

Claim 10 (previously presented): A method for synthesizing a synthetic polymer and starch blend, comprising:

mixing 1-30 wt.% granular and unplasticized starch having a moisture content of less than about 1% with 1-24 wt.% compatibilizer comprising a polymer and a grafting compound, wherein said grafting compound is covalently bound to said polymer, and the remainder a second polymer; and

reacting the mixture such that the compatibilizer and the granular starch become covalently bound.

Claim 11 (original): The method of Claim 10 wherein said reacting comprises applying heat and pressure.

Claim 12 (original): The method of Claim 10 wherein said compatibilizer comprises 1-20 wt.% grafting compound and 80-99 wt.% polymer.

Claim 13 (original): The method of Claim 12 wherein said grafting compound is maleic anhydride.

Claim 14 (original): The method of Claim 12 wherein said grafting compound comprises 5 wt.% of said compatibilizer.

Claim 15 (original): The method of Claim 12 wherein the polymer of the compatibilizer is selected from the group consisting of polyethylene, polypropylene, polystyrene, polybutylene, poly(styrene-ethylene-butylene-styrene), poly(ethylene terephthalate), polyvinyl fluoride, polyvinylchloride, or derivatives thereof.

Claim 16 (previously presented): The method of Claim 10 wherein said second polymer is selected from the group consisting of polyethylene, polypropylene, polystyrene, polybutylene, poly(styrene-ethylene-butylene-styrene), poly(ethylene terephthalate), polyvinyl fluorides, polyvinyl chloride, or derivatives thereof.

Claim 17 (currently amended): A synthetic polyethylene and starch covalently bound mixture comprising:

5-30 wt.% of as granular and unplasticized starch selected from the group consisting of wheat starch, cornstarch, rice starch, potato starch or high amylose starch, wherein said starch is not gelatinized and has a moisture content of less than about 1%;

a first polymer selected from the group consisting of polyethylene, polypropylene or polyethylene derivatives;

a compatibilizer comprising a polymer and a grafting compound, the grafting compound being selected from the group consisting of maleic anhydride or chemicals having similar reactive properties, and the polymer being covalently bound to the grafting compound;

wherein application of heat and pressure to the mixture produces covalent bonds between the compatibilizer and the starch;

wherein said compatibilizer is covalently bound to said first polymer;

wherein said starch granules are 10-100 micrometers in diameter;

wherein about 5 wt.% of monomer units of said compatibilizer ~~is attached to approximately 5% of individual monomer units~~ have the grafting compound attached;

wherein the resulting mixture has similar mechanical properties to pure polyethylene; and

wherein said mixture absorbs relatively little water.

Claim 18 (previously presented): The synthetic polymer and starch blend of Claim 1 wherein the second polymer is selected from the group consisting of polyethylene, polypropylene, polystyrene, polybutylene, poly(styrene-ethylene-butylene-styrene), poly(ethylene terephthalate), polyvinyl fluoride, polyvinyl chloride or derivatives thereof and the compatibilizer is comprised of maleic anhydride grafted poly(styrene-ethylene-butylene-styrene).

Claim 19 (withdrawn): The blend of Claim 1 wherein said grafting compound is selected from the group consisting of epoxides.